



Safety Risk Management

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Subject Outline

- ✚ Some examples of "lack of SRM"
- ✚ Definitions
- ✚ Concepts
- ✚ Process
- ✚ Tools
- ✚ Questions????



What NOT to do!!!

- ✱ Henderson, Nevada
 - ✧ Rocket fuel Oxidizer
 - ✧ Solid rocket fuel
 - ✧ Planning Commission (Gas Line)
 - ✧ 1 Fatality, Millions in damage to homes
- ✱ Fully automated flight (A320)
 - ✧ Redundancy?
 - ✧ Oops....



Definitions

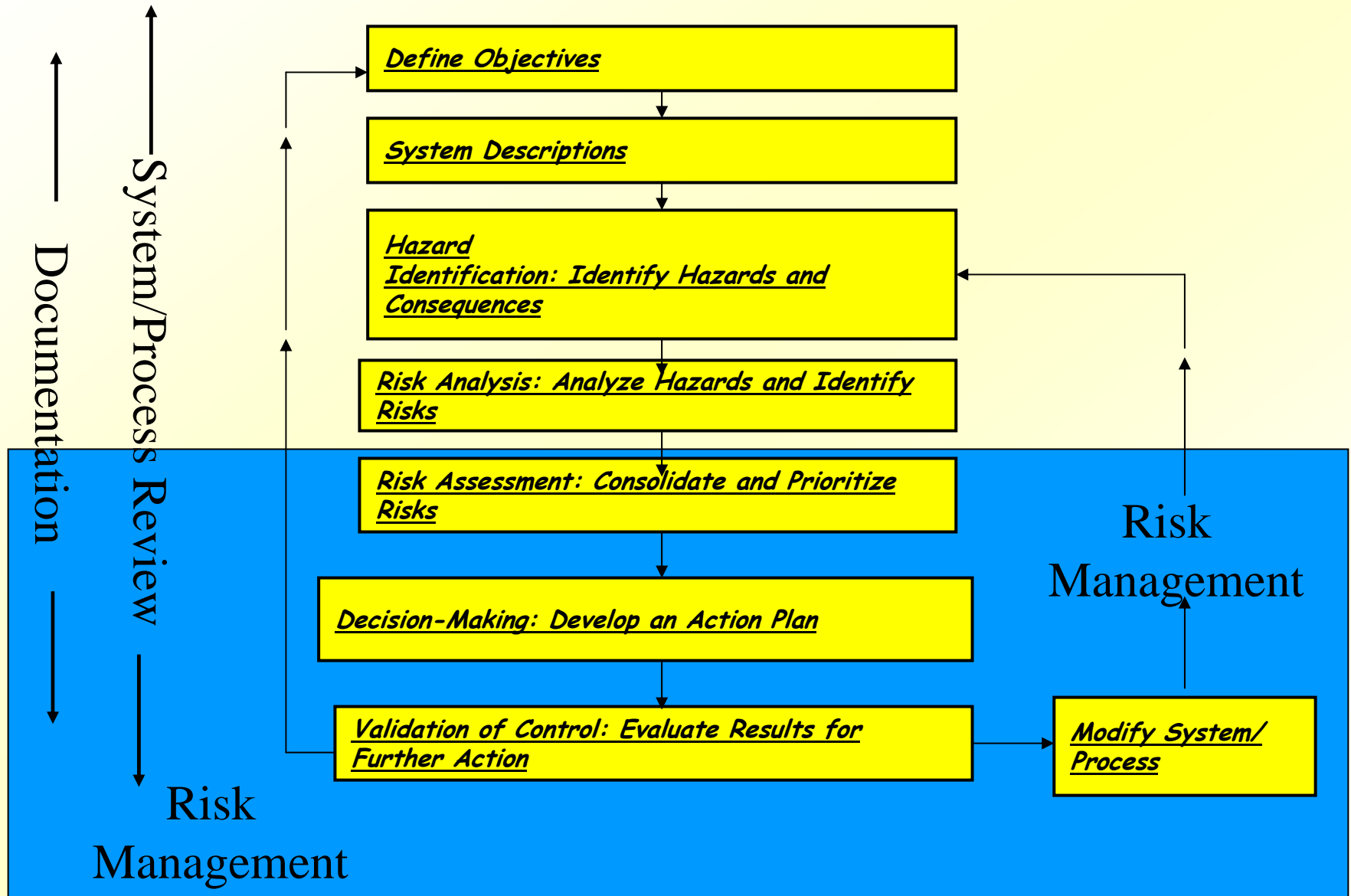
- ✿ **Hazard** -- Condition, event or circumstance that could lead to an unwanted or undesired event. (Storage of Fuel)
- ✿ ***Hazard identification*** -- Identification of a substance, activity, or condition as potentially posing a risk to human health or safety. (Leaking Gas Pipe)
- ✿ ***Risk*** -- The expression of the impact of an undesired event in terms of severity and event likelihood.



Concepts

- ✿ Safety is the goal of transforming the severity and likelihood of risk that is inherent in all human activity to lower, acceptable levels.*Patterns In Safety Thinking: A Literature Guide To Air Transportation Safety. (McIntyre).*
- ✿ System Safety - Enhanced Safety Risk Management looking at all components - NOT individually, but as part of a bigger entity

System Safety Process





Tools

- ✿ Hazard ID
 - ✦ Past data
 - ✦ Brainstorming
 - ✦ Fault tree, Functional Hazard Analysis, etc.
- ✿ Risk assessment
 - ✦ Matrix
- ✿ Feedback
 - ✦ ASRS, Hotline (confidentiality systems)
 - ✦ Reporting vehicles (Required/Voluntary)
 - ✦ Focused collection of data



Questions????

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